

Purolite is the premier manufacturer and innovation leader for ion exchange resins and adsorbent media in the world.

Family owned 100% dedicated to resin technology Entrepreneurial Spirit





Global Reach

- Manufacturing plants in USA, Romania and China
- Research labs in US, UK, Romania, Moscow and China
- Sales offices in 40+ countries

Industries Served

- Semiconductor
- Petrochemical and Refining
- Mining and Metals Finishing
- Nuclear Power
- Chemical Processing

- Industrial Softening
- Pharmaceutical
- Potable Water
- **Ground Water Remediation**
- Food and Beverage

Purolite's Nuclear Plant Customers

Region	PWRs	BWRs	PHWR	AGR
USA	49	13		
Latin America	2		1	
France, Spain	25	3		
Rest of Europe	9	1		
Russia	5	6		
Canada			8	
UK				13
China, Taiwan, S.Korea	13	2	2	
Japan (Sendai)	1			



Purolite's Capability

Exclusive license from Oak Ridge National Laboratory
 For manufacture of bifunctional resins for technetium and perchlorate

Exclusive manufacturer of Diphonix resins

For selective removal of lanthanides and actinides

Radionuclide cleanup - Hanford,WA, Paducah, KY

For Technetium-99 and Uranium

Exclusive manufacturer of CoSeq for EPRI

Cobalt Sequestration



Cleaning up Fukushima

- We are experts in:
 - Water Treatment,
 - Ion Exchange Resins and adsorbents (media)
- We clean-up high purity & salt water (Cs, Co, Sr, Ca, Mg)
- Every tank at Fukushima has a different water composition requiring ongoing chemistry adjustments to achieve ND
- Removing 90% of radioactivity is easy. Removing remaining 10% requires real expertise



Achieving ND

2 years ago we achieved Non-Detect (ND) on all 62 radionuclides using Purolite's CORE Technology

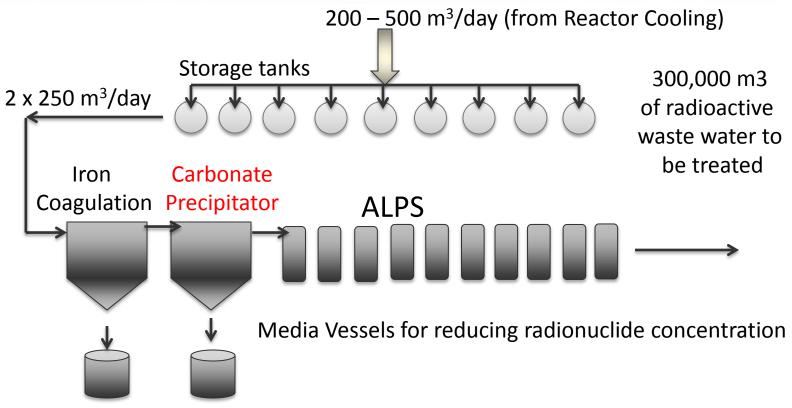


New Purolite Solution

- All water exiting the Cooling Loop will be directly treated to ND without precipitation
- No Need to build more storage tanks for radioactive waste



Current Problem: ALPS Generates High Volume of Sludge



Radioactive Sludge 3000 m³/year

Current volume of Radioactive Sludge is too much for the limited storage space available at the site



New Purolite Solution

- The large volume of Stored radioactive water (330,000 m³) will be treated without precipitation which currently generates most of the waste
- Waste will be reduced by > 90%

SUMMARY

- 1. We have achieved Non-Detect (ND)
- 2. Our Solution = No More Tanks for radioactive waste
- 3. Our Solution = over 90% reduction in waste
- 4. Long term manufacturer /service provide to nuclear industry
- 5. We have the resources and skills needed
- 6. We are committed for the long term

